

### **Abstract of the disclosure**

[0038] An interface that allows a user to model and analyze the properties of three dimensional surface and the regions surrounding such surfaces. The user manipulates a deformable physical modeling material that defines the geometry of a surface. A position sensor such as a laser scanner captures position data specifying the geometry of the surface. A processor processes the geometry data using a selected analysis function to produce result data representing computed characteristics of the surface or its surrounding region. The result data projected as an image onto the deformable surface. The interface permits the user to modify a surface geometry and directly visualize the characteristics of the modified geometry in real time.